

CAS No: 111-88-6

RTECS No:

1-Octanethiol

1-Mercaptooctane

1-Octylthiol

 $C_8H_{18}S$ / $CH_2SH(CH_2)_6CH_3$

Molecular mass: 146.3

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING
FIRE	Combustible. Gives off irritating or toxic fumes (or gases) in a fire.	NO open flames.	Powder, carbon dioxide, foam.
EXPLOSION	Above 69°C explosive vapour/air mixtures may be formed.	Above 69°C use a closed system, ventilation.	
EXPOSURE			
Inhalation	Cough. Sore throat. Headache. Nausea. Vomiting. Dizziness.	Ventilation, local exhaust, or breathing protection.	Fresh air, rest. Refer for medical attention.
Skin	Redness.	Protective gloves.	Rinse and then wash skin with water and soap.
Eyes	Redness.	Safety spectacles.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
Ingestion	Headache. Nausea. Vomiting. Dizziness.	Do not eat, drink, or smoke during work.	Rinse mouth. Refer for medical attention.

SPILLAGE DISPOSAL

Collect leaking and spilled liquid in sealable containers as far as possible. Absorb remaining liquid in sand or inert absorbent and remove to safe place. (Extra personal protection: filter respirator for organic gases and vapours.) Do NOT let this chemical enter the environment.

PACKAGING & LABELLING**EMERGENCY RESPONSE**

NFPA Code: H2; F2; R1

STORAGE

Fireproof. Separated from strong bases, strong acids and oxidants.

IMPORTANT DATA

Physical State; Appearance

COLOURLESS LIQUID, WITH CHARACTERISTIC ODOUR.

Chemical dangers

The substance decomposes on burning producing toxic gases including hydrogen sulfide and sulfur oxides. Reacts violently with oxidants causing fire hazard. Reacts with strong acids, strong bases and strong reducing agents. Attacks metal and rubber.

Occupational exposure limits

TLV not established.
MAK not established.

Routes of exposure

The substance can be absorbed into the body by inhalation and by ingestion.

Inhalation risk

No indication can be given about the rate in which a harmful concentration in the air is reached on evaporation of this substance at 20°C.

Effects of short-term exposure

The substance is mildly irritating to the eyes, the skin and the respiratory tract. The substance may cause effects on the central nervous system. Exposure at high levels may result in lowering of consciousness.

PHYSICAL PROPERTIES

Boiling point: 199°C

Melting point: -49°C

Relative density (water = 1): 0.84

Solubility in water: none

Vapour pressure, kPa at 25°C: 0.06

Relative vapour density (air = 1): 5.0

Relative density of the vapour/air-mixture at 20°C (air = 1): 1

Flash point: 69°C o.c.

Explosive limits, vol% in air: 0.8-?

Octanol/water partition coefficient as log Pow: 4.21 (estimated)

ENVIRONMENTAL DATA

The substance is very toxic to aquatic organisms.

NOTES

ADDITIONAL INFORMATION

LEGAL NOTICE

Neither the EC nor the IPCS nor any person acting on behalf of the EC or the IPCS is responsible for the use which might be made of this information